REMARKS

Claims 1-31 are pending in this application.

Claims 1-31 are rejected.

The office action indicates that base claim 12 is rejected under 35 USC §102(e) as being unpatentable over Debry U.S. Patent No. 6,385,728. The office action also indicates that base claims 1 and 19 are rejected under 35 USC §103(a) as being unpatentable over Debry in view of Mandelbaum U.S. Patent No. 5,552,897; and that base claim 11 is rejected under 35 USC §103(a) as being unpatentable over Debry in view of Mandelbaum, Furman U.S. Patent No. 5,483,653 and Boyle U.S. Patent No. 6,738,901. Base claims 1 and 30 are rejected under 35 USC §112, first paragraph. These rejections are respectfully traversed.

Debry discloses a document distribution system including a document source (e.g., a file server), a user (client), and a print server. Debry's Figure 1 shows a method in which the user sends a request to the document source, and the document source creates a will-call certificate and sends the will-call certificate and a digital certificate to the user (col. 7, lines 15-19). The will-call certificate can include printer identification.

The user receives the will-call certificate, includes it in a print request, and sends the print request to the print server (col. 7, lines 43-45). The print server then sends the will-call certificate to the document source, along with its digital certificate (col. 7, lines 50-55). The document source uses the will-call and digital certificates to verify the authenticity of the print server. If the print server is authenticated, a requested document is sent to the print server.

The digital certificate is "created by a process that enables a printer's manufacturer to build a secret key into the printer during manufacturing" (col. 9, lines 46-48).[1] The secret key is also recorded in a database maintained by a certificate authority such as the printer manufacture (col. 9, lines 48-51).

The will call certificate does not contain the printer's secret key. It only contains a public key (col. 10, lines 9-10). According to col. 9, lines 65+, the secret key is used between the printer and the certificate authority.

'102 rejection of Claim 12

Claim 12 recites a system for the distributed printing of documents over a computer network. The system comprises a server connected to the network, and a printer connected to the network. The documents are stored on the server.

Claim 12 has been amended to recite that the printer is programmed to receive at least one cryptographic key after a document order has been placed and use said at least one key to establish a printer identity, and then to establish the printer identity with the server via the network. The server is programmed to send at least one encrypted document to the printer after the document order has been placed and the printer identity has been established. Support for the amendment can be found in blocks 106 and 110 of Figure 2, and blocks 210 and 224 of Figure 3a.

1 Incorrectly cited in the last response as col. 10, lines 46-51.

Debry does not teach or suggest a printer that receives a cryptographic key after a document order has been placed and uses that key to establish a printer identity. Debry's printer receives its secret key at the time of manufacture, long before a document order is placed.

Debry's printer does not establish its secret key identity with the document source. According to col. 9, lines 65+, the printer's secret key is used between the printer and the certificate authority.

Although the will call certificate contains a printer identification, the printer identification is already known to the document source, and is established before a document is requested. Debry does not indicate whether the printer identification is a cryptographic key or something else.

On page 3, the office action alleges that "the key used to establish identity is being sent ... from the printer to the printer server." However, the allegation is irrelevant. Claim 12 recites a printer that establishes an identity with a server that stores the documents to be distributed. Debry does not teach or suggest that his printer establishes its identity with the document source.

For these reasons, Debry does not teach or suggest the system of claim 12. Therefore, claim 12 and its dependent claims 13-17 should be allowed over Debry alone.

'103 rejections of Claims 1 and 19

Debry does not teach or suggest a printer that establishes its identity with a document server. As discussed above, Debry's document source knows the

identity of the printer prior to communicating with the printer, since the printer identification is specified in the will call certificate. Thus, there is no need for Debry's printer to establish its identity with the document source.

The office action alleges that Debry's will call certificate is used to establish a printer identity. However, the allegation is irrelevant. Claim 1 recites a printer that establishes its identity from a smart card. Claim 19 recites a printer that establishes its identity from a cryptographic key read from a smart card.

Moreover, the allegation is not accurate. The printer identification is merely indicated in the will call certificate. Debry does not indicate whether the printer identification is tied to its secret key. Yet if it is, the secret key is built into the printer during manufacturing" (col. 10, lines 46-51). It is not established by the will call certificate.

Debry does not teach or suggest the use of a smart card to give the printer its identity. The office action acknowledges this much. However, the office action alleges that such use of a smart card is suggested by Mandelbaum.

Mandelbaum does not teach or suggest the use of a smart card to establish a printer identity. Mandelbaum discloses fax machine that receives an encrypted transmission. The transmission may be encrypted with an intended recipient's public key The recipient inserts a smart card into the fax machine, and the smart card uses a corresponding private key to decrypt the transmission (see col. 5, lines 33+). Thus, the smart card is simply used as a decryption engine. An unintended recipient will not have the correct smart card and, therefore, will not be able to decrypt the transmission.

Mandelbaum's fax machine receives an encrypted transmission regardless of whether a smart card is inserted in the fax machine. Mandelbaum's system does not prevent the fax machine from receiving the encrypted document.

As for the identity of the fax machine, it is tied to a phone number.

Thus, the combined teachings of Debry and Mandelbaum do no produce a method having all of the limitations of claim 1 or a network printer having all of the limitations of claim 19.

Moreover, the office action provides no evidence of reason, incentive or motivation to modify Debry's system to use a smart card to establish a printer identity with a document server. On page 4, the office action appears to argue that motivation exists because Mandelbaum and Debry are analogous. However, it only establishes that a person skilled in the art would be aware of a fax system that uses a smart card to decrypt transmissions.

The office action also alleges that the smart card provides portability. However, the allegation is unsubstantiated, since neither Debry or Mandelbaum provide it. Moreover, the allegation is irrelevant, since portability not a concern for either Debry or Mandelbaum.

The office action also alleges that the smart card enhances security. True, Mandelbaum does use the smart card for security. However, Mandelbaum does not suggest using the smart card as recited in claims 1 or 19.

For these reasons, base claims 1 and 19, and their dependent claims should be allowed over the combination of Debry and Mandelbaum.

'103 rejection of Claim 11

Claim 11 recites using a printer and at least one cryptographic key to establish a printer identity with a document server. As discussed above, none of the cited documents teach or suggest this feature.

Claim 11 also recites using a printer to indicate status of the printing so that a server can charge for copies that were actually printed, wherein the printer sends back a status acknowledgement to the server. Please note that the server is a document server

The office action acknowledges that neither Debry nor Mandelbaum teaches or suggests a printer that indicates a printing status to a document server so the document server can charge for copies that were actually printed.

The office action cites column 4, lines 20-24 of Furman and alleges that a user can determine the status of printing through a server. More precisely, this passage states that a user can determine the status of a print job by making a request via a print server terminal or workstation (a server window can be used to give the user feedback that the print job is completed). However, no activity by the printer is taught or suggested.

The office action also cites col. 8, lines of Boyles and alleges that it discloses a network printer that registers a cost with a server for every copy printed. However, the passage teaches no such thing. Boyles simply states that a registered user's cash account will be decremented whenever copies are made, purchases are made over the Internet, etc. These activities are all resident within a server, and, therefore, don't require information from a printer.

The office action also argues (on page 4) that this feature (a printer that indicates a printing status to a document server ...) is inherent; otherwise, the server would have no way of telling if the job was printed. This "inherency" allegation is not supported by Furman or Boyles, who offer other ways.

Thus, neither Boyles nor Furman teaches or suggests a printer that indicates a printing status to a document server so the document server can charge for copies that were actually printed. Therefore, claim 11 should be allowed over the combined teachings of Debry, Mandelbaum, Furman and Boyles.

'103 rejections of claims 18 and 24

The office action withdraws the indicated allowability of claim 18, stating that the amendment to claim 18 makes it unallowable over Debry in view of Davis U.S. Patent No. 5,568,552.

Claim 18 was amended to remove certain features. These features are now recited in claim 24, which depends from claim 18. Thus, claim 24 is identical to the claim that was allowed in the previous office action.

However, the office action rejects claim 24 over Debry in view of Davis, but does not indicate why the allowability has been withdrawn. This is confusing enough. To add to the confusion, the explanation of this new rejection is based on Debry alone.

The issue should be moot, however, for its base claim should be allowed over the combination of Debry and Davis. Claim 18 recites a printer comprising means for reading at least one decryption key; and means for using the at least one decryption key to establish a printer identity. The office action does not identify an element in Debry that constitutes a reading means, nor does it identify

an element in Debry that responds to the reading means by establishing a printer identity. Debry simply discloses that its secret key identity is established during manufacture (see col. 9, lines 46-51), and that its printer identification is established prior to the generation of will-call certificates.

The office action cites col. 7, lines 40-49 of Debry. However, these lines simply state that the will-call certificate may contain the printer identification, as well as other information such as secret information and a key. However, it does not teach or suggest that the will-call certificate is used to establish the printer identity. To the contrary, the printer identity is established prior to the generation of the will call certificate. Thus, the office action has not established prima facie obviousness of claim 18. Accordingly, the '103 rejections of claim 18 and its dependent claim 24 should be withdrawn.

'102 and 103 rejections of claim 30

None

'112, first paragraph, rejection of claim 30

Claim 30 recites a printer including means for using at least one decryption key to establish a printer identity at the time of document distribution. The recitation "the printer not having the identity prior to the document distribution" has been deleted.

The office action contends that the specification does not support a printer including means for using at least one decryption key to establish a printer identity at the time of document distribution.

Attention is directed to Figure 1, which discloses a smart card reader 38 and processor 40. This is an example of such means.

Attention is directed to Figure 2. At the time of document distribution (which is initiated at block 106 when an order for a document has been placed), a smart card is inserted into the smart card reader (block 110).

Attention is now directed page 8, lines 6-9. The printer takes the identity of the smart card when the smart card is inserted.

Thus, the specification clearly indicates that the printer identity is established at the time of document distribution. Contrast this to Debry, which discloses that the secret key is stored in the printer at the time of manufacture.

'112, first paragraph, rejection of claim 1

The office action contends that the specification does not support a method of using a smart card to give an identity to the printer, the printer not having the identity until the identity is given.

Attention is directed to page 8, lines 6-9 of the specification: the printer 36 takes the identity of the smart card 48 when the smart card 48 is inserted into a smart card reader 38 (the printer reads a key pair stored in the smart card). Further attention is directed to Figure 7, block 208: the printer assumes the identity of the smart card.

Restated, the printer does not have the identity of the smart card until the smart card is used to give that identity to the printer. Thus, the specification provides support for claim 1.

'112, first paragraph, rejection of claim 12

This rejection has been rendered moot by the amendment above to claim 12.

'112, second paragraph, rejection of claims 26 and 27

Claims 26 and 27 are rejected under 35 USC. §112, second paragraph, as being indefinite for reciting "the remote site." These claims have been amended to recite "a remote site."

Conclusion

The examiner is respectfully requested to withdraw the rejections of claims 1-31. The examiner is encouraged to contact applicants' attorney Hugh Gortler to discuss any issues that might remain.